

IN THE CLAIMS

Please cancel claims 1 to 10.

Please enter new claims 11 – 22.

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11. A method for detecting or measuring an analyte in a sample by a specific binding assay comprising:
- (a) providing a haptenylated analyte specific component comprising a first hapten or ^{1, 2, 2nd} hapten-like molecule linked to an analyte specific component;
 - (b) providing a second hapten or hapten-like molecule which is not linked to the analyte specific component;
 - (c) providing an assay component comprising a binding partner which binds to both the first and the second hapten or hapten-like molecules, wherein neither the first hapten or hapten like molecule, the second hapten or hapten-like molecule, nor the binding partner interact with the analyte;
 - (d) combining the haptenylated analyte specific component, the sample and the assay component for an incubation step, wherein the second hapten or hapten-like molecule is present for at least part of the incubation step; and
 - (e) measuring a signal representative of the presence or concentration of the analyte.
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12. The method of claim 11, wherein the analyte specific component is selected from a group consisting of the analyte, an analyte analogue, and a binding partner of the analyte.

13. The method of claim 11, wherein the second hapten or hapten like molecule is identical to, or an analogue of, the first hapten or hapten-like molecule.

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14. The method of claim 13, wherein the first hapten or hapten-like molecule/ binding partner are selected from a group consisting of digoxin/anti-digoxin antibody, digoxigenin/anti-digoxigenin antibody, biotin/avidin, biotin/streptavidin, biocytin/avidin, and biocytin/streptavidin.

15. The method of claim 11, wherein the assay component comprises a particle linked to the binding partner.

16. The method of claim 15, wherein the specific binding assay is a homogeneous immunoassay.

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17. The method of claims 11, wherein the second hapten or hapten-like molecule is present for the entire incubation step.

18. The method of claim 11 wherein the second hapten or hapten-like molecule is combined with the assay component prior to combining with the haptenylated analyte specific component.

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19. A method to improve the sensitivity or precision of a specific binding assay for an analyte in a sample, wherein the specific binding assay components comprise a haptenylated analyte specific component comprising a first hapten or hapten-like molecule linked to an analyte specific component and an assay component comprising a binding partner which binds to the first hapten or hapten-like molecule, wherein neither the first hapten or hapten like molecule nor the binding partner interact with the analyte, the improvement comprising:

(a) providing a second hapten or hapten-like molecule which binds to the binding partner but does not interact with the analyte and is not linked to an analyte specific component; and

(b) combining the haptenylated analyte specific component, the assay component and the sample for an incubation step, wherein the second hapten or hapten-like molecule is present for at least part of the incubation step.

20. The method of claim 19, wherein the second hapten or hapten like molecule is identical to, or an analogue of, the first hapten or hapten-like molecule.

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21. The method of claim 20, wherein the first hapten or hapten-like molecule/ binding partner are selected from a group consisting of digoxin/anti-digoxin antibody, digoxigenin/anti-digoxigenin antibody, biotin/avidin, biotin/streptavidin, biocytin/avidin, and biocytin/streptavidin.

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22. The method of claim 19 wherein the analyte specific component is selected from a group consisting of the analyte, an analyte analogue, and a binding partner of the analyte.

23. The method of claim 19, wherein the assay component comprises a particle linked to the binding partner.

24. The method of claim 19, wherein the specific binding assay is a homogeneous immunoassay assay.

25. The method of claims 19, wherein the second hapten or hapten-like molecule is present for the entire incubation step.

26. The method of claim 19 wherein the second hapten or hapten-like molecule is combined with the assay component prior to combining with the haptenylated analyte specific component.

27. A kit for detecting or measuring an analyte in a sample comprising:

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- (a) a first reagent comprising a first hapten or hapten-like molecule linked to an analyte specific component;
- (b) a second reagent comprising a second hapten or hapten-like molecule which is not linked to the analyte specific component; and
- (c) a third reagent comprising a binding partner which binds to both the first and the second hapten or hapten-like molecules,
- wherein neither the first hapten or hapten like molecule, the second hapten or hapten-like molecule, nor the binding partner interact with the analyte.
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28. The kit of claim 27, wherein the second reagent is supplied combined with the first or third reagents.

29. The kit of claim 28, wherein the third reagent comprises a particle linked to the binding partner.

30. The kit of claim 28, wherein the analyte specific component comprises the analyte, an analyte analogue, or a binding partner of the analyte.

31. The kit of claim 28, wherein the second hapten or hapten like molecule is identical to, or an analogue of, the first hapten or hapten-like molecule.

32. The kit of claim 31, wherein the first hapten or hapten-like molecule/ binding partner are selected from a group consisting of digoxin/anti-digoxin

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AM antibody, digoxigenin/anti-digoxigenin antibody, biotin/avidin, biotin/streptavidin,
DI biocytin/avidin, and biocytin/streptavidin.